



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 150
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------------|------------------------|
| 10/659,774 | 09/10/2003 | Henry Haverinen | 944-001.090-1 | 4877 |
| 4955 7590 06/04/2007 WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468 | | | EXAMINER DAILEY, THOMAS J | |
| | | | ART UNIT 2152 | PAPER NUMBER |
| | | | MAIL DATE 06/04/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 10/659,774 | Applicant(s) HAVERINEN ET AL. | |
| | Examiner Thomas J. Dailey | Art Unit 2152 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/24/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A preliminary amendment was received and entered on June 5, 2006 that added claims 15-23.
2. Claims 1-23 are pending in this application.

Claim Objections

3. Claims 1 and 9 are objected to due to their non-descriptive preambles. The claim recites "A method" and "A system." This is insufficient, as the preamble should establish the environment or objective of the claimed invention.
4. Claims 5-6, 8-9, 14, 16-17, 21, and 23, are objected to because they are dependent claims which recite, for example, "An authentication server as in claim 4..." (claim 5, line 1) and "A computer program product as in claim 7, ..." (claim 8, line 1). These dependent claims should recite, "*The* authentication server as claimed in claim 4..." etc. Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-3 and 18-19 are rejected under 35 U.S.C. because the claimed invention is directed to non-statutory subject matter.

7. Claim 1 recites, "A method, comprising..." (line 1) and recites limitations that are not steps such as, "a first authentication server and other authentication servers each receiving respective unique realm names." (lines 4-5) As the claim is directed to a method with system claim limitations, the claim is directed to neither a "process" nor a "machine," but rather overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only.
8. Claims 2-3 are rejected by the same rationale set forth in claim 1's rejection.
9. Claims 18-19 recite, "An authentication network element, comprising..." and all the limitations are software elements (determining and preparing means).
Therefore the claims are directed to functionally descriptive material that is not embodied on a computer system or computer readable storage medium which is non-statutory.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-3, 6, 9-12, and 17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
12. Claim 1 recites, "A method, comprising..." (line 1) and recites limitations that are not steps such as, "a first authentication server and other authentication servers each receiving respective unique realm names." (lines 4-5) It is unclear how a method can comprise limitations that are not steps, but system components.
13. Claims 2-3 are rejected by the same rationale set forth in claim 1's rejection.
14. Claims 6, 9, and 17, recites, "the other authentication server" (claims 6 and 17: line 5; claim 9: line 4). There is insufficient antecedent basis for this limitation in these claims or their parent claims.
15. Claim 10, recites, "wherein at least two of the authentication servers are as in claim 4" (line 7) it is unclear whether the claim is an independent system claim or is a dependent claim furthering limiting the apparatus claim of claim 4.
16. Claim 11, recites, "wherein at least two of the authentication servers are as in claim 5" (line 7) it is unclear whether the claim is an independent system claim or is a dependent claim furthering limiting the apparatus claim of claim 5.

17. Claim 12, recites, "wherein at least two of the authentication servers are as in claim 6" (line 7) it is unclear whether the claim is an independent system claim or is a dependent claim furthering limiting the apparatus claim of claim 6.

18. The following is a quotation of the forth paragraph of 35 U.S.C. 112:

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

19. Claims 20 and 21 are rejected under 35 U.S.C. 112, forth paragraph, as it does not specify a further limitation of the subject matter claimed, as the claims are duplicates, verbatim, of claims 13 and 14, respectively. The applicant is further advised that should claims 13 and 14 be found allowable, claims 20 and 21 will additionally be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

20. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2152

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

21. Claims 1-2, 4-5, 7-8, 10-13, 15-16, 20, and 22 are rejected under 35

U.S.C. 102(b) as being anticipated by Cheng et al (US Pat. 5,544,322), hereafter
Cheng.

22. As to claim 1, Cheng discloses a method, comprising:

a first authentication server and other authentication servers each receiving
respective unique realm names (column 5, lines 19-24);

the first authentication server receiving a request for authentication of a
terminal (column 5, lines 31-35); and

during authentication between the terminal and the first authentication server,
the first authentication server transmitting to the terminal a reauthentication
identity including the unique realm name assigned to the first authentication
server (column 5, lines 36-42, the certificate is "a reauthentication identity" and
will inherently identify the authentication server and its unique realm).

23. As to claim 4, Cheng discloses an authentication server (column 5, lines 19-24), comprising:

means for performing authentication (column 5, lines 31-35); and
means for transmitting to a terminal requesting authentication a reauthentication identity including a unique realm name uniquely identifying the authentication server (column 5, lines 36-42, the certificate is "a reauthentication identity" and will inherently identify the authentication server and its unique realm).

24. As to claim 7, Cheng discloses a computer program product comprising:

a computer readable storage structure embodying computer program code thereon for execution by a computer processor in an authentication server, with said computer program code comprising instructions for transmitting to a terminal requesting authentication a reauthentication identity including a unique realm name uniquely identifying the authentication server (column 5, lines 36-42, the certificate is "a reauthentication identity" and will inherently identify the authentication server and its unique realm).

25. As to claim 13, Cheng discloses a terminal, comprising:

means for requesting reauthentication of a communication session between the terminal and a content server (column 5, lines 43-46, client reads on terminal and application server reads on content server);

means for receiving from a first authentication server a reauthentication identity including a unique realm name assigned to the first authentication server (column 5, lines 36-42, the certificate is "a reauthentication identity" and will inherently identify the authentication server and its unique realm); and

means for transmitting to an authentication network element a request for reauthentication using the reauthentication identity including the unique realm name (column 5, lines 43-52, authentication library reads on "authentication network element").

26. As to claim 15, it is rejected by the same rationale set forth in claim 4's rejection.

27. As to claims 20 and 22, they are rejected by the same rationale set forth in claim 13's rejection.

28. As to claims 2, 5, 8, and 16, Cheng discloses:

an authentication network element receiving a request for reauthentication transmitted by the terminal using the reauthentication identity including the unique realm name (column 4, lines 43-47); and

the authentication network element determining from the reauthentication identity included in the request the unique realm name (column 4, lines 43-52).

29. As to claim 10, Cheng discloses a system, comprising a plurality of terminals, a plurality of authentication servers, and at least one content server (Figs. 1 and 2), the terminals operative so as to request content from the content server after authentication (column 8, lines 48-51) and occasional reauthentication with one or another of the authentication servers, wherein at least two of the authentication servers are as in claim 4 (column 5, lines 31-35).

30. As to claim 11, it is rejected by the same rationale set forth in claim 10's rejection.

31. Claims 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Limsico (US Pat. 6,662,228).

32. As to claim 18, Limsico discloses an authentication network element, comprising:
means for determining from a reauthentication identity included in a request for reauthentication transmitted by a terminal a unique realm name included in the request and uniquely indicating an authentication server (column 6, lines 12-27, the user identification (reauthentication identity) is checked to see if it contains a substring of characters which identifies a second authentication server (the authentication server recited in the claim) from which the user can be verified); and

means for preparing a message for forwarding the request to the authentication server indicated by the unique realm name (column 6, lines 12-27, the user identification information is sent to the second authentication server).

33. As to claim 19, it is rejected by the same rationale set forth in claim 18's rejection.

Claim Rejections - 35 USC § 103

34. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

35. Claims 3, 6, 9, 12, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng as applied to claims 1, 4, 7, and 15 above, and in view of Limsico.

36. As to claim 3, Cheng discloses the invention substantially with regard to the parent claim 1, but does not disclose the authentication network element forwarding the request to the authentication server indicated by the unique realm name included as part of the reauthentication identity; and the terminal and the

authentication server indicated by the unique realm name performing reauthentication.

However, Limsico discloses a authentication network element forwarding a request to a authentication server indicated by a unique realm name included as part of the reauthentication identity (column 6, lines 12-27, the user identification (reauthentication identity) is checked to see if it contains a substring of characters which identifies a second authentication server (the authentication server recited in the claim) to which the user identification information is sent so it can be verified); and the terminal and the authentication server indicated by the unique realm name performing reauthentication (column 6, lines 12-27).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Cheng and Limsico in order to have a central repository of authentication information thereby permitting easier removal, replacement, and addition of users to a single database instead of requiring updating separate database (Limsico, column 3, lines 35-43).

37. As to claim 6, 9, and 17, Cheng discloses the invention substantially with regard to the parent claims 4, 7, and 15, and but does not disclose means for forwarding the request to another authentication server if the unique realm name indicates the other authentication server.

However, Limsico discloses means for forwarding the request to another authentication server if the unique realm name indicates the other authentication server (column 6, lines 12-27, the user identification (reauthentication identity) is checked to see if it contains a substring of characters which identifies a second authentication server (the authentication server recited in the claim) to which the user identification information is sent so it can be verified).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Cheng and Limsico in order to have a central repository of authentication information thereby permitting easier removal, replacement, and addition of users to a single database instead of requiring updating separate database (Limsico, column 3, lines 35-43).

38. As to claim 12, Cheng and Limsico disclose the invention substantially with regard to the parent claim 6, and further discloses a system, comprising a plurality of terminals, a plurality of authentication servers, and at least one content server (Cheng, Figs. 1 and 2), the terminals operative so as to request content from the content server after authentication (Cheng, column 8, lines 48-51) and occasional reauthentication with one or another of the authentication servers, wherein at least two of the authentication servers are as in claim 4 (Cheng, column 5, lines 31-35).

39. Claims 14, 21, and 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng as applied to claims 13, 20, and 22 above, and in view of Barriga-Caceres et al (US Pub No. 2003/0163733), hereafter "Barriga."

40. As to claims 14, 21, and 23, Cheng discloses the invention substantially with regard to the parent claims 13, 20, and 22, and further discloses means for transmitting to an authentication network element a request for reauthentication using the reauthentication identity including the unique realm name includes the reauthentication identity in an identity response packet.

But, Cheng does not disclose the identity response packet is according to an Extensible Authentication Protocol.

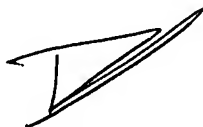
However, Barriga discloses an authentication system (Abstract) that utilizes an Extensible Authentication Protocol ([0101]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Cheng and Barriga in order to utilize a well-known protocol in the art that would allow Cheng's system to be compatible with other, already deployed, systems.

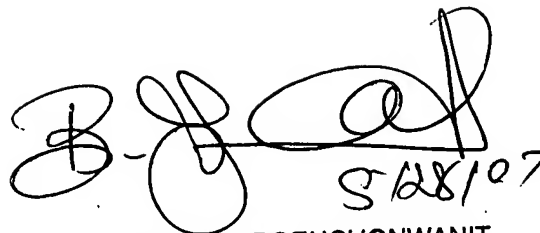
Conclusion

41. For additional prior art made of record and not relied upon and considered pertinent to applicant's disclosure see attached Notice of References Cited, Form PTO-892.
42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.
43. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
44. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2152



TJD
5/25/2007



5/28/07

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER